IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:	Baker et al.	Application No.:	09/825,431
Filing Date:	April 3, 2001	Confirmation No.:	2071
Examiner:	Rachna Singh DESAI	Attorney Docket:	209.1001
Art Unit:	2176	Customer No.:	23280
Title:	PRIVILEGED COMMUNICATION SYSTEM WITH ROUTING CONTROLS		

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APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41

Sir:

Appellants submit this Reply Brief for consideration of the Board of Patent Appeals and Interferences (the "Board") in response to the Examiner's Answer dated June 2, 2010, and in support of their appeal of the final Office Action dated June 2, 2009. Appellants respectfully reassert each of the arguments asserted in Appellants' Brief dated April 2, 2010, and provide herein only additional comments in response to the observations and arguments raised in the Examiner's Answer.

No fee is believed required. If any fee is required at this time, the Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

ARGUMENTS

I. Rejections under 35 U.S.C. § 103(a) over Turnbull et al., U.S. Patent No. 6,092,201, in view of Liu et al., U.S. Patent No. 6,760,752

    1. Claims 1, 2, 12, and 17

        A. The step of storing a privileged digital communication in a segregated location on a data storage device as recited in claim 1 is not taught or suggested by the combination of the cited references

In the Appeal Brief filed on April 2, 2010, Appellants argued that the step of storing a privileged digital communication in a segregated location on a data storage device as recited in claim 1 is not taught or suggested by the combination of the cited references.

In the Examiner's Answer mailed on June 2, 2010, the Examiner disagreed and stated that "Examiner believes that a segregated location is taught by Liu when he teaches storing the communication on the key server which facilitates secure transfers of messages." Examiner's Answer, page 12. The Examiner also stated that "the key server of Liu discloses storing secure emails on the server" and relied upon figure 1, step 258 of figure 2B, column 3, lines 12-16, column 10, lines 31-36, and column 13, lines 3-11, of the Liu patent.

Appellants respectfully submit that the portions of the Liu patent relied upon by the Examiner do not teach or suggest storing secure emails on the key server in the Liu patent.

First, Applicants respectfully note that, according to the Liu patent, key server 108 "temporarily stores user's public keys and recovery data," rather than emails. Column 17, lines 47-49. Appellants further note that emails are not mentioned in the list of components of the key server in the Liu patent. Key server 108, according to the Liu patent, "includes one or more server applications executing on the server computer and includes an operating system 200, key exchange application 202, HTTP post and forwarding proxy server application 204, recovery application 206, key list 208, status list 209, and trusted third party (TTP) application 210," rather than emails. Column 13, lines 4-9.

Figure 1 of the Liu patent does <u>not</u> show or suggest a segregated location for privileged digital communications on a data storage device, for example, because there is no mention of digital communication *per se* among the components of the key server of Figure 1. Figure 1 lists RAM, User Interface, CPU and Interface as the only components of the key server. See Figure 1.

Step 258 of Figure 2B also does <u>not</u> show or suggest a segregated location for privileged digital communications on a data storage device. Step 258 recites "Generate Send Message **Request** and Transmit to Key Server." Figure 2 (emphasis added). The message itself, however, is <u>not</u> part of the Send Message Request, which, according to the Liu patent, "includes the E-mail address (or hash of the E-mail address) of the recipient, the E-mail address (or hash of the E-mail address) of the sender and the hash of the message to be sent." Column 16, lines 18-23.

Column 3, lines 12-16, of the Liu patent also do <u>not</u> show or suggest a segregated location for privileged digital communications on a data storage device. Column 3, lines 12-16, of the Liu patent recites:

> The central key server can be one of a plurality of distributed key servers, each of which include public keys and status information to enable key retrieval from multiple locations, which facilitates secure transfers of messages between users.

Appellants submit that the "public keys and status information" included on the key server does <u>not</u> read on a digital communication (i.e., an email).

Column 10, lines 31-36, of the Liu patent also does <u>not</u> disclose a segregated location for privileged digital communications on a data storage device. The Liu patent (column 10, lines 31-36) of recites:

> "Server" refers to a computer program that provides services to clients, and more generally refers to a computer that runs a server program. "Key Server" refers to a computer that includes a server program for maintaining, validating and providing keys for use by clients in transmitting secure E-mail or other messages over a network.

Appellants submit that there is no mention of a segregated location for privileged digital communication on a data storage device in this portion of the reference.

The Liu Patent (column 13, lines 3-11) also fails to disclose a segregated location for privileged digital communications on a data storage device. Column 13, lines 3-11, recite:

> Key server 108 can be a server computer executing one or more server programs. Key server 108 includes one or more server applications executing on the server computer and includes an operating system 200, key exchange application 202, HTTP post and forwarding proxy server application 204, recovery application 206, key list 208, status list 209 and trusted third party (TTP) application 210. In one implementation, key server 108 and key retrieval server 180 are the same server.

Appellants submit that this portion of the reference clearly does not disclose a segregated location for privileged digital communications on a data storage device.

Accordingly, Appellants submit that the disclosure relied upon in the Examiner's Answer does not teach or suggest the step of storing a privileged digital communication in a segregated location on a data storage device, as recited in instant claim 1. The outstanding rejection is therefore deficient as the combination of the cited references does not teach or suggest that the privileged digital communication is to be stored "in a segregated location for privileged digital communications on a data storage device" as recited in claim 1.

> B. The step of "attach[ing] a privileged attribute to a digital communication" as recited in claim 1 is not taught or suggested by the cited references

In the Appeal Brief, Applicants argued that the combination of the cited references does not teach or suggest "attach[ing] a privileged attribute to a digital communication, the privileged attribute selected by the creator of the digital communication before the digital communication is sent," as recited in instant claim 1.

In the Examiner's Answer mailed on June 2, 2010, the Examiner disagreed and stated that "Turnbull discloses using attribute certificates which convey access privileges or authorization for certain actions set by a user which meets the limitation, attach a privilege attribute to a digital communication, the privilege attribute selected by the creator of the digital communication before the digital communication is sent." Examiner's Answer, page 23. The Examiner referred to the Turnbull patent, Abstract, column 4, lines 7-30, and column 5, lines 8-25, to support this position.

Appellants respectfully submit that, according to the Turnbull patent (column 4, lines 7-10), the "attribute certificates" are stored in the directory 20 which is "a repository, or database,

of certificates (e.g., verification and/or encryption), cross-certificates 36, authority revocation lists 38, and certificate revocation lists 40." According to the Turnbull patent (column 4, lines 10-14), , "[t]he directory 20 may be a stand-alone database (or repository accessible by a suitable interface, for example Lightweight Directory Access Protocol LDAP) or contained within the certification authority 22 and/or server/manager 24." Accordingly, Appellants submit that the "attribute certificates" described in the Turnbull patent (column 4, lines 7-30) of are not attached to a digital communication, as recited in instant claim 1.

The Abstract and column 5, lines 8-25, of the Turnbull patent also do not describe attaching "attribute certificates" to a digital communication as recited in instant claim 1.

Appellants therefore submit that the disclosure relied upon in the Examiner's answer does not read on the step of "attach[ing] a privileged attribute to a digital communication, the privileged attribute selected by the creator of the digital communication before the digital communication is sent," as recited in instant claim 1.

C. A "shared list" in the Turnbull patent does not read on "a privileged distribution list" recited in claim 1

In the Appeal Brief, Appellants argued that "shared lists" as described in the Turnbull patent do not read on the "privileged distribution list" as recited in instant claim 1.

In the Examiner's Answer mailed on June 2, 1010, the Examiner disagreed and stated that "Turnbull teaches any of the users can be authorized to generate a shared list which includes the user identity and secure communication parameters." Examiner's Answer, page 24. The Examiner asserted that this is created "when the digital communication is created," allegedly because "a user sending a secure communication or email is defining the parameters and shared list of that communication, it is occurring as the communication is created." *Id.*

Appellants respectfully note that users of the system described in the Turnbull patent would select a shared list that is already in existence when they create, e.g., an outgoing communication. For example, the Turnbull patent states that "to send a secure message, a user **selects** a shared list, and the shared list name is automatically translated into the list of users in that group and accesses the public key certificates of each user ...." Column 6, lines 40-49

(emphasis added). The Turnbull patent also states that "**[o]nce the list is created**, other users, if authorized, may access the shared list to retrieve ...." See, e.g., column 3, lines 35-37 (emphasis added) .

Appellants therefore submit that the "shared lists" in the Turnbull patent do not read on the "privileged distribution list" recited in instant claim 1.

> D. The step of "restrict[ing] access to the privileged digital communication to the at least one intended recipient according to the privileged distribution list" as recited in claim 1 is not taught or suggested by the cited references.

In the Appeal Brief, Appellants' argue that the combination of the cited references does not teach or suggest to "restrict access to the privileged digital communication to the at least one intended recipient according to the privileged distribution list" as recited in instant claim 1.

In the Examiner's Answer, the Examiner disagreed and stated that "Turnbull discloses the list of recipients is used to restrict access to the secure communication which meets the limitation, restrict access to the privileged digital communication to the at least one intended recipient according to the privileged distribution list." The Examiner relies on the Turnbull patent (column 3, lines 14-51) to support this position.

As stated in the Appeal Brief, the "access" described in the Turnbull patent (column 3, lines 14-51) is access to "a shared list," rather than a communication itself. The Turnbull patent (column 3, lines 14-51) recites:

> Generally, the present invention provides a method and apparatus for extending secure communication operations via shared lists. This is accomplished by creating a shared list in accordance with authorization parameters by one user and subsequently accessing the shared list via the authorization parameters set by this and other users. To create the list, a user (e.g., an end-user, a certification authority/administrator, etc.) within the secured communication system determines whether it has been enabled, or authorized, to create a shared list. If so, the user identifies at least one other user to be added to the shared list. Having identified another user, the end-user creating the shared list verifies that the secure communication parameters (which may include encryption public key certificate, signature verification public key certificate, and/or a signature verification public key certificate of a certification authority) it has received regarding the another user is trustworthy. If the secure communication parameters are verified as trustworthy, the secure communication parameters of the another user are added to the shared list. To authenticate the shared list

(i.e. allowing subsequent verification of its authenticity), the user creating the list signs it. Once the list is created, other users, if authorized, may **access the shared list** to retrieve certificates (e.g., encryption and/or signature verification) of the users contained in the list. With such a method and apparatus, users can access a user created shared list to retrieve certificates for each member of a group of recipients without having to access a directory. Thus, **if a user does not have access to a directory, it can still process secure communications, i.e., encrypt outgoing messages with the public keys of the intended recipients and verify signatures on received messages.** The shared list also allows an end-user the ability to obtain certificates of a group of end-users, certification authorities, and/or administrators simultaneously from another user, instead of a certificate at a time. In addition, the present method and apparatus provides control **over the ability to create, use and/or modify a shared list**. (emphasis added).

Appellants respectfully submit that, contrary to the Examiner's assertion, there is nothing in the Turnbull patent that limits access to the "shared list" only to the users on the shared lists. The Turnbull patent (column 6, lines 10-13) states that "the end-user desiring to access the list may or may not be identified in the list and in some instances, the users listed may not be able or authorized to learn the identities of other users on the list (classified lists)." .

The Turnbull patent (column 9, lines 2-4) further states that it is "the certification authority and/or service/manager [that] authorizes at least some of the plurality of users to access the shared list."

Appellants therefore submit that under the Turnbull patent, anyone authorized by "the certification authority and/or service/manager," rather than the creator of the digital communication, may access the "shared list" and that there is nothing in the Turnbull patent that limits access to the "shared list" only to the users on the shared lists.

> E. The step of "prevent[ing] forwarding of the digital communication to an unintended recipient" as recited in claim 1 is not taught or suggested by the cited references

In the Appeal Brief, Appellants argue that the combination of the cited references does not teach or suggest to "prevent forwarding of the digital communication to an unintended recipient" as recited in instant claim 1.

In the Examiner's Answer, the Examiner disagreed and stated that "A user not on the list of the intended recipients will not be able to receive the digital communication which meets the limitation, restrict routing of the privileged digital communication to the intended recipients and

prevent forwarding of the digital communication to an unintended recipient." Reply Brief, page 25. The Examiner relied on columns 3-4 and column 6, lines 28-49, of the Turnbull patent to support this assertion.

Appellants respectfully submit that the Turnbull patent does not mention "forwarding of privileged digital communication" in columns 3-4 and column 6, lines 28-49", and that the Examiner's assertion is totally unsupported by the Turnbull patent.

For the foregoing reasons, as well as the reasons presented in the Appeal Brief, which are hereby incorporated by reference, Appellants submit that no *prima facie* case of obviousness has been established, and they respectfully request reversal of the rejection.

2. Claim 18

In the Appeal Brief, Appellants argue that the combination of cited references does not teach or suggest attaching "an executable module to a digital communication when the digital communication is created" as recited in instant claim 18.

In the Examiner's Answer, the Examiner points to the Turnbull patent (column 3, line 52, to column 4, lines 5) of, for the purported teaching of the executable module. The Turnbull patent (column 3, line 52, to column 4, lines 5) recites:

> The present invention can be more fully described with reference to FIGS. 1 through 5. FIG. 1 illustrates a schematic block diagram of a secured communications system 10 that includes a plurality of end-users 14-18, a directory 20, a certification authority 22, and a server or security management device (hereafter server/manager) 24. The end-users 14-18 may be personal computers, laptop computers, work stations, personal digital assistants, or any other device that manipulates digital information based on programming instructions that include encryption software. Note that, in the secured communication system, end-users only transceive secure communications and do not have administrative responsibilities for any other end-user. An end-user that has administrative responsibilities for other end-users is referred to as an administrator. The programming instructions executed by the end-users will described below stored in memory 28-32 and may, for example, be based on encryption software such as Entrust/Client manufactured by Entrust Technologies, Limited. The memory 28-32 may be read-only memory, random access memory, hard drive memory, floppy disk memory, magnetic tape memory, or any other means for storing digital information.

Appellants respectfully submit that there is no teaching or suggestion of an

executable module **attached** to a digital communication in this or any portion of the Turnbull patent.

In the Examiner's Answer (page 26), the Examiner states that "Claim 18 is drawn to the system for executing the method of claim 1."

Appellants respectfully submit that since claim 18 is not dependent from claim 1, it is not limited by the steps of claim 1.

Accordingly, Appellants submit that a *prima facie* case of obviousness has not been established, and that claim 18 is therefore not rendered obvious by the combination of the cited references.

For the foregoing reasons, as well as the reasons presented in the Appeal Brief, reversal of the rejection is respectfully requested.

3. Claims 23, 25 and 26

In the Appeal Brief, Appellants argued that the combination of the Turnbull patent and the Liu patent does not teach or suggest a digital communication system comprising a confidentiality notice that is: (i) displayed to a user, and (ii) acknowledged by the user before displaying the privileged communication, as recited in instant claim 22.

In the Examiner's Answer, the Examiner asserted that claim 22 is part of the present rejection and noted that "page 15 of the Examiner's Answer and page 14 of the final rejection addresses claim 22."

Appellants respectfully submit that "page 15 of the Examiner's Answer" and "page 14 of the final rejection" concerned the rejection over the combination of the Turnbull patent, the Liu patent and U.S. Publication No. 2003/0196098 to Dickinson, III et al.

Appellants submit that the present rejection does not include the Dickinson publication, and that the combination of the Turnbull patent and the Liu patent, which are the only references

included in the present rejection, does <u>not</u> teach or suggest a digital communication system comprising a confidentiality notice as recited in instant claim 22.

For the foregoing reasons, as well as the reasons presented in the Appeal Brief, reversal of this rejection is respectfully requested.

4. Claims 57, 58 and 59

In the Appeal Brief, Appellants argued that the combination of the cited references does <u>not</u> teach or suggest attaching "an executable module to the privileged digital communication" as recited in instant claim 57.

In the Examiner's Answer, the Examiner asserted that "Turnbull teaches that only users listed in the shared list are authorized to receive and access secure communications which meets the limitation, managing manipulation of [its] contents, according to a privileged distribution list." Examiner's Answer, page 27.

The Examiner however did <u>not</u> indicate where a step of **attaching** "an executable module to the privileged digital communication" as recited in instant claim 57 might be disclosed in the cited references. Appellants were <u>not</u> able to find such a step in the cited references.

Accordingly, Appellants respectfully submit that no *prima facie* case of obviousness has been established, and that the combination of the cited references does not render claim 57 obvious.

For the foregoing reasons, as well as the reasons presented in the Appeal Brief, reversal of this rejection is respectfully requested.

B. Rejections under 35 U.S.C. 103(a) over Turnbull et al., U.S. Patent No. 6,092,201, in view of Liu et al., U.S. Patent No. 6,760,752, and further in view of Dickinson, III et al., U.S. Patent Application Publication No. 2003/0196098.

1. The Liu patent teaches away from the claimed combination

In the Appeal Brief, Appellants argued that the Dickinson publication and the Liu patent are not properly combinable because the Liu patent teaches away from the combination.

In the Examiner's Answer (page 29), the Examiner responded to this argument by mere conclusory statements:

> It would have been obvious to a person of ordinary skill in the art at the time of the invention to have modified the system of Turnbull/Liu with Dickinson's segregated server because all the references are from the same filed of endeavor of providing secure data transmissions between Internet users. Further, all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

1. Claims 10 and 11

In the Appeal Brief, Appellants argued that the combination of the cited references does not teach or suggest displaying a confidentiality notice "to a user and acknowledged by the user before displaying the privileged communication" as recited in instant claim 10.

An **exemplary** notice is described in paragraph [0046] of the present specification:

> THIS COMMUNICATION IS PRIVILEGED AND CONFIDENTIAL
> This e-mail, and any attachment(s) hereto, is intended only for use by the addressee(s) named herein. If you are not the intended recipient of this e-mail, you are hereby notified that any reading, dissemination, distribution or copying of this e-mail, and any attachments hereto, is strictly prohibited. If you have received this e-mail in error, please immediately notify the sender and permanently delete the original and any copy of any e-mail and any printout thereof.

In the Examiner's Answer (page 30, paragraph [0039]) , the Examiner asserted that "Dickinson discloses a confidentiality notice that is displayed to a user and acknowledged by the user before displaying the privileged communication." .

Appellants respectfully submit that there is no mention of "a confidentiality notice" in paragraph [0039] of the Dickinson publication, which instead recites:

> Turning to FIG. 6(a), at 602, the e-mail firewall 105 determines if decryption of portions of the message 204 is required. If so, then at 604, decryption is performed in accordance with stored private keys 628. Storing private keys is well known in the art of public key cryptography. After decryption, or if no decryption is required, the e-mail firewall 105 applies policy managers 216, which can perform four types of actions (shown at 610, 612, 614, 616, and 620) on e-mail message 204 for each policy. Criteria actions 610 present filtering criteria selected by the administrator. Exception actions 612 determine which criteria 610 are excluded. Multiple criteria 610 can be selected which effectively results in a logical AND operation of the criteria. Multiple exceptions 612 can be selected which effectively results in a logical OR operation of the exceptions; that is, any one of the exception conditions being true will result in a policy not being triggered. In another embodiment, a generic Boolean expression is used in lieu of the criteria and exception combination. Annotation actions 614 cause generation of attachment to message 602 or insertion of text into the body 208 of the message. The manner by which annotations are made is based on a policy entered by the administrator. Notification actions 616 cause the sending of one or more e-mail notifications when a given policy is triggered. Notifications can be sent to sender, recipient, administrator, or any e-mail address that is defined by the administrator. In addition, notification actions 616 allow specification of whether the original message 204 should accompany the notification. Disposition action 620 determines whether the message should continue to the destination(s) (specified by field 620) or whether one of a plurality of alternative actions 622 such as deferral, quarantine, return to sender, or dropping of the message are required.

Appellants therefore submit that the Examiner has not shown that the combination of the cited references either teach or suggest a digital communication system comprising a confidentiality notice that is: (i) "displayed to a user" and (ii) "acknowledged by the user before displaying the privileged communication" as recited in instant claim 10.

On the contrary, the Dickinson publication states that "[a]dvantageously, embodiments employing the principles of the ... invention [described] therein operate **transparently** to individual users ...." *See Dickinson publication*, paragraph [0009] (emphasis added).

With further regard to instant claim 11, Appellants submit that the combination of the cited references does not teach or suggest a system "wherein the user acknowledges the confidentiality notice by clicking on a GUI button" as recited in instant claim 11.

For the foregoing reasons, as well as the reasons presented in the Appeal Brief, reversal of the rejection is respectfully requested.

2. Claims 41-43 and 45-48

In the Examiner's Answer, the Examiner stated that "Appellant argued that the cited references do not teach marking an electronic communication as privileged because Turnbull does not teach digital communications in any portions."

Appellants respectfully clarify that, in the Appeal Brief, they argued that the combination of the cited references does <u>not</u> teach or suggest "marking the electronic communication privileged with a privileged attribute which is selected by the creator of the electronic communication before the electronic communication is sent" as recited in instant claim 41. Furthermore, the rejection of claims 41-43 and 45-48 is unsupported because there is no disclosure of any digital communications (i.e., emails) **in the portion of the Turnbull patent relied upon by the Examiner** in support of this contention (i.e., column 4, lines 7-30).
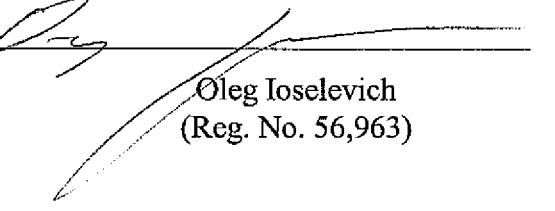
Reversal of the rejection of claims 41-43 and 45-48 for the reasons set forth in the Appeal Brief is respectfully requested.

CONCLUSION

Favorable consideration of this Reply Brief is respectfully requested.

Respectfully submitted,

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